Final Report to the Maryland General Assembly on Trauma Center Standby and MIEMSS Regulatory Costs

Maryland Health Services Cost Review Commission

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Final Staff Recommendations on Trauma Center Standby and MIEMMS Regulatory Costs

Introduction

During the 2003 Legislative Session, the Maryland General Assembly adopted Senate Bill 479 to aid in stabilizing Maryland=s trauma system by providing reimbursement for physicians= losses due to uncompensated care and underpayment by Medicaid. The legislation also provided a subsidy for trauma center on-call expenses. On-call expenses are those related to payments paid by hospitals to physicians who are not at the hospital but can be at the hospital within thirty minutes to provide care. Standby costs on the other hand relate to compensation provided to ensure the physical presence of a physician at the hospital to render necessary services. The Governor enacted the legislation by signing the legislation on May 22, 2003 as Chapter 33 of the 2003 Laws of Maryland.

The General Assembly asked the Commission to examine how standby costs and certain regulatory costs are treated under the All Payer System. Section 4 of the legislation requires the Health Services Cost Review Commission (HSCRC) to report to the General Assembly on or before September 1, 2003 and December 31, 2003 on:

- the anticipated time frame in which the HSCRC will begin including trauma costs in the State=s hospital rate setting system;

- the specific trauma center standby costs that may and may not be included in the State=s hospital rate setting system; and

- the trauma costs incurred by a trauma center to meet the Maryland Institute for Emergency Medical Services Systems (MIEMSS) trauma center regulatory requirements that may and may not be included in the State=s hospital rate setting system.

Chapter 33 also requires the HSCRC to develop guidelines for the approval of an annual grant from the Maryland Trauma Physicians Fund of up to $275,000 to subsidize the standby costs for an out-of- state pediatric trauma center that has entered into an agreement with MIEMSS. The provisions of this section refer to the recovery of a certain level of standby costs incurred relative to Marylanders utilizing the trauma center at Children's National Medical Center in Washington, DC.

Background

During the 2001 Legislative Session, there was much debate about the use of the Maryland Emergency Medical System Operations Fund (MEMSOF). At the time, the fund was supported by an $8 surcharge per year on certain motor vehicle registrations. Chapter 33 of the Acts of 2001 increased hat surcharge to $11 to provide sufficient revenue for the fund through FY 2008. The Fund is used for:

- The Maryland Fire and Rescue Institute;

- Operations at MIEMSS;
- Shock Trauma;
- Local grants under the Senator William H. Amoss Fire Rescue and Ambulance Fund;
- The Department of State Police Aviation Division; and
- The Volunteer Company Assistance Fund.

During deliberation on SB 292 in 2001 (Chapter 33), there was considerable discussion on the funding needs of the regional trauma centers since they did not receive a State subsidy for providing trauma care through MEMSOF or any other means. What resulted from this discussion was language in Chapter 33 to establish a Study Panel to consider the funding needs of the network of trauma centers participating in the State=s Emergency Medical System (EMS) that do not receive funding through MEMSOF. The Panel was directed to:

- Examine the costs associated with the operation of adult and pediatric trauma centers, each of the Level I through level III trauma centers, and any other trauma centers that participate in the State=s EMS system;
- Evaluate the amount, extent, source, and contributing factors of any financial gain or loss attributable to each of the State=s designated trauma centers that are not already recovered under the HSCRC hospital rate setting system; and
- Consider potential funding sources or other approaches to address any funding needs identified by the study.

During the study, the tenor of the debate was heightened by the temporary closure of Washington County Hospital=s trauma program in June of 2002 due to a lack of physicians available to provide services at the Level II trauma center. The trauma program reopened in October but as a level III trauma center. Later in the year, Peninsula Regional Medical Center also reported to the Panel that they experienced severe staffing issues and contemplated closing their trauma unit.

In January 2002, the Panel recommended various options to reduce financial pressures on trauma centers and the physicians who serve them. The Panel=s study influenced the introduction of SB 479 during the 2003 Legislative Session which, as enacted, established a fund supported by a $5 surcharge (every two years) on Motor Vehicle Administration (MVA) automobile registrations to provide additional reimbursement for trauma physicians to recover costs of uncompensated care and Medicaid shortfalls as well as to provide subsidies to Level II and III trauma centers to recover a specified amount of on-call costs.

To implement the provisions of SB 479, the Maryland Health Care Commission and the

HSCRC have promulgated regulations on the transfer of monies from MVA, the imposition of reporting requirements, the manner in which disbursements will be made from the fund to physicians and trauma centers, and the establishment of a certain Medicaid CPT modifier for physician care to trauma patients. The MVA began collecting the $5 surcharge on new vehicle titles on July 1, 2003 and commenced collecting the surcharge on vehicle renewals in September 2003. Physicians and trauma centers will be eligible for uncompensated care and on-call reimbursements from the fund for services that are provided to patients on the Maryland trauma registry beginning October 1, 2003. However, disbursements will be made after the first semi-annual report on these costs is due to the MHCC (April 30, 2004). The modifier for increased Medicaid payments for physicians providing trauma care is effective for patients admitted on or after December 1, 2003. The provisions of the legislation sunset on June 30, 2005.

Trauma Standby Costs and MIEMSS Regulatory Costs

In addition to the provisions described above, Chapter 33 requires the HSCRC to report to the General Assembly on the trauma center standby costs that may or may not be currently included in hospital rates, a time-frame describing when such costs may be included in rates, and an assessment of costs related to the MEIMSS regulatory requirements that are imposed on trauma centers.

A Reasonable Level of Standby Costs are Considered Reimbursable Part A Costs under Medicare

During Study Panel deliberation, it was represented to the Panel that the Medicare Reimbursement Manual permits a reasonable level of compensation for physician availability (or standby) costs as Part A facility costs for Emergency Department services. Based on this understanding, the question arose as to whether such standby costs should be or are already included in the rate base for Maryland trauma centers. With the exception of trauma costs at Johns Hopkins Bayview Medical Center, heretofore, the HSCRC has not recognized trauma standby costs in hospital rates nor in the ICC/ROC.

Section 2109 of the Medicare Reimbursement Manual (see attachment I) acknowledges that emergency department physicians may spend a portion of their time waiting for the arrival of patients and that hospitals frequently need to provide emergency department on-site coverage on evenings, weekends and/or holidays. Due to the fact that revenue is not generated when a physician is on standby to cover the costs of these physician services, hospitals frequently offer supplemental compensation or minimum compensation guarantees.

Under Section 2109 of the Manual, physician availability costs or standby costs are those that are generated as a result of the necessity to have the physical presence of a physician in a hospital under a formal arrangement to render emergency treatment to patients. Physicians must be on the hospital premises in reasonable proximity of the emergency department or trauma center and cannot be "on-call@.

For certain hospitals nationally, Medicare provides reimbursement to hospitals for standby costs at emergency departments at a rate based on the lesser of the actual compensation paid to the physician

for availability and the reasonable compensation determined through the application of a reasonable compensation equivalent (RCE) limit for the hours of emergency department standby costs. Compensation means monetary payments, fringe benefits, deferred compensation and any other items of value (excluding office space or billing and collection services) that a hospital furnishes to the physician in return for the physician=s services.

The RCE limits apply to cost reimbursed providers and units of PPS providers (e.g., outpatient departments and psych units prior to full implementation of the OPPS and Psychiatric PPS.) The RCE limits, however, do not apply to costs of physician compensation that are attributable to Graduate Medical Education costs and do not apply to critical access hospitals. Further, compensation that a physician receives for activities that may not be paid for under either Part A or Part B are not considered in applying these limits.

Nonetheless, PPS-reimbursed hospitals and skilled nursing facilities complete the same Medicare cost report and PPS hospitals initially run their physician compensation costs through the RCE limit calculations. A subsequently completed cost report worksheet "backs out" any previous cost reduction mode as a result of the RCE limits calculation. Therefore, the PPS providers have no reimbursement impact.

Under Medicare regulation, non-PPS hospitals are defined as:

- cost reimbursed hospitals where rates are based on a predetermined ceiling;
- Veterans Administration hospitals;
- hospitals reimbursed under state cost control systems like that managed under the HSCRC;
- hospitals reimbursed in accordance with certain demonstration projects;
- nonparticipating hospitals furnishing services to Medicare beneficiaries;
- psychiatric hospitals;
- rehabilitation hospitals;
- children's hospitals;
- long-term care hospitals;
- cancer hospitals;
- hospitals located outside the 50 states, the District of Columbia, or Puerto Rico; and
- hospitals reimbursed under a special arrangement with Medicare.

The RCE is a dollar limit for a full work year (2080 hours) and is differentiated by physician specialty with variations for rural areas, metropolitan areas of less than 1,000,000 population and metropolitan areas of greater than 1,000,000 population. The RCE schedule effective January 1, 2004 is shown below:

Medicare Reasonable Compensation Equivalents for Physician Standby Services, (for 2080-Hour Work Year). Effective January 1, 2004

Specialty	Nonmetro-politan areas	Metropolitan areas less than one million	Metropolitan areas greater than one million
Total	$ 159,800	$ 171,400	$ 177,200
GP/FP	$ 142,500	$ 136,700	$ 138,700
Int Med	$ 150,200	$ 154,100	$ 165,600
Surgery	$ 182,900	$ 204,100	$ 208,000
Pediatrics	$ 130,900	$ 152,100	$ 140,600
OB/GYN	$ 200,300	$ 194,500	$ 196,400
Radiology	$ 217,600	$ 231,100	$ 225,300
Psychiatry	$ 138,700	$ 142,500	$ 154,100
Anesthesiology	$ 167,500	$ 200,300	$ 200,300
Pathology	$ 208,000	$ 219,500	$ 215,700

Notes: Taken from the 8/1/2003 Federal Register. Compensation is for a 2080 hour work year.

Medicare permits the RCE base to be increased by the lesser of actual costs or 5% of the RCE base to reflect costs incurred by the provider for an emergency department physician's membership in professional associations and continuing medical education. The base may also be increased for the proportional physician malpractice insurance costs incurred by the hospital on behalf of the subject physician relative to trauma services provided by the physician.

Hospitals generally compensate trauma physicians for availability services either on an hourly rate, under a salary arrangement or through a minimum guarantee contract. A minimum guarantee contract is less frequently utilized but is one where the physician is guaranteed a minimum level of compensation for availability services and may bill patients for trauma services rendered. If total charges fall short of the minimum guarantee amount, the hospital is obligated to pay the physician the difference to make up the guarantee amount. Based on the surveys received by hospitals, Maryland hospitals do not use minimum guarantee arrangements with their trauma physicians as it is defined by Medicare.

Below is how the RCE is calculated under Medicare regulations:

$$\frac{\text{Hours (Supervisory, Admin., Availability)}}{2080} \times \text{Published RCE} = \text{Time-Adj. RCE base}$$

T-Adj. RCE Base + allow. for membership in prof. org. and CME + Mal. Ins = Adj. RCE

Under this calculation, the allowance for membership in professional organizations and Continuing Medical Education is the lessor of actual hospital costs or 5% of the RCE base Medicare regulations state that if no specialty category is listed above (for example, in determining the reasonable cost for an emergency room physician), the RCE level for the "Total" category shall be used, which is based on income data for all physicians. (See Attachment I for Medicare Reimbursement Manual Regulations on RCE).

Separate federal regulations on the national Metropolitan Statistical Areas (MSA) specify where Maryland hospitals fall under the specific population categories. Maryland trauma centers are categorized as follows:

- **$** Non-metropolitan (Rural) Trauma Centers: Peninsula Regional Medical Center and Memorial of Cumberland

- **$** Metropolitan Trauma Centers with MSA of less than 1 million: Washington County Hospital

- **$** Metropolitan Trauma Centers with an MSA of greater than 1 million: University of Maryland Medical Center, Johns Hopkins Hospital, Johns Hopkins Bayview Medical Center, Sinai Hospital, Prince Georges Hospital Center, and Suburban Hospital

Below is an example of how the calculation would work using the attached RCE schedule:

Dr. A is an Anesthesiologist, and during the year he is contracted to provide supervisory, administrative and availability services to the Trauma Center located in an urban MSA with more than 1 million population. For trauma, the hospital paid Dr. A $132,000 for supervision, administration and availability services for 1040 hours throughout the year. The Hospital also pays Dr. A an additional $6,000 for membership to relevant professional organizations and Continuing Medical Education and covers $16,000 for malpractice costs related to the contract.

$\frac{1040}{2080}$ X $200,300 =$100,150 is the Time-adjusted RCE Base

The allowable limit for costs associated with membership to professional organizations and Continuing Medical Education is:

$100,150 X .05 = $5,005.25

$100,150 + $5,005.25 + $16,000 = $121,155 is the Adjusted RCE

Contract Costs
$132,000 supervision, administration and availability
$ 6,000 professional org. membership and CME
$ 16,000 Malpractice
$154,000 Total

Under this example, allowable costs would be the lesser of the reported total actual cost and the adjusted RCE amount – which would yield an allowable amount of $121,155

Medicare requires that a claim for Part B hospital costs or Part A and Part B hospital costs must me supported by the following data maintained by the hospital:

- $ A signed copy of the contract between the hospital and the physician(s).
- $ A written copy of the allocation agreement and supporting data depicting the distribution of the physician's time between services to the provider, services to individual patients and services not reimbursable under Medicare.
- $ A permanent record of payments made to the physician(s) under the agreement.
- $ A record of the amount of time the physician was physically present on the hospital premises to attend to emergency patients.
- $ A permanent record of all patients treated by the physician, copies of all physician bills generated for such services and a record of imputed charges for services for which no billing was made by the hospital or physician.
- $ A schedule of physician charges.
- Evidence that the provider explored alternative methods for obtaining emergency physician coverage before agreeing to physician compensation for availability services.

Assessment of Maryland Trauma Center Standby and Incremental MIEMSS Costs

In order to determine the amount of standby costs that are or are not included in the rates of trauma center, it necessary for the Commission to obtain reliable and verifiable data. Such costs are not readily available through the abstract discharge data nor from the financial reports submitted to the Commission. Therefore, at the request of the HSCRC, the Maryland Hospital Association (MHA) has initiated several surveys to better understand the magnitude of relevant costs that trauma centers experience, whether such costs are currently in base rates or not, and where, if at all, they are reported so that these data can be verified.

During the Legislative Session, MHA initiated a survey in an attempt to generally determine the level of trauma facility costs for physician having to be on-call or on standby. While this survey provided some valuable general information on the potential level of standby costs incurred by Maryland Trauma centers, it was not specific enough to accurately assess how the standby costs are currently reported and whether they were currently in rates. That survey was also not intended to obtain data and information of trauma costs related to the MIEMSS regulations.

To obtain further detail on these missing components, the MHA issued a second survey in the Summer of 2003 to all of the hospitals who operate a trauma center in Maryland. The results of the survey varied from hospital to hospital and a workgroup consisting of representatives of trauma centers and HSCRC staff was established to refine the survey instrument. The workgroup met four times to discuss the application of the Medicare RCE for non-PPS hospitals, how the RCE could be applied in

establishing a reasonableness test for physician standby costs at Maryland trauma centers and appropriate definitions to determine true incremental costs directly related to MIEMSS regulatory requirements.

In the final version of the survey, staff requested information on the standby expense in Fiscal Year 2003 for Trauma Surgeons, Orthopedic Surgeons, Neurosurgeons and Anesthesiologists designated to the trauma center (see Attachment II). Hospitals were also requested to report on other FY 2003 expenses related to MIEMSS requirements that are believed to be over and above the normal costs of an emergency department such as the cost of retaining a trauma director, and costs associated with operating the trauma department (see Attachment III).

In addition to discussing how the Medicare RCE methodology could apply to Maryland standby costs, the Workgroup examined the MIEMSS requirements to determine which of those represent functions that are over and above the responsibilities of operating a hospital that does not have a trauma center. If there are MIEMSS requirements that reasonably should be the standard for the operation of an efficient community hospital, an argument can be made that those costs are already appropriately compared on that basis in the ICC and ROC.

HSCRC Inter-hospital Cost Comparison and Bayview Full Rate Review

The trauma cost issue was also broached in the April 7, 2003 full rate application of Johns Hopkins Bayview Medical Center. Bayview claimed that their designation as a Level II trauma center in December 1998 has required the significant commitment of resources, training and staff to care for critically injured patients. Bayview also argued that since this designation occurred after the current charge per case base period that those costs are not include in its base rates. Of the hospitals in Bayview=s peer group, only three of the eight hospitals have trauma centers.

Staff concurred that trauma centers incur costs over and above other hospitals due to state regulatory mandates. Without actual cost data, staff deemed it reasonable to provide the hospital with the difference between the average cost included in the peer group and the hospital=s actual cost. This calculation resulted in a staff recommendation of including an additional $1,265,000 in Bayview=s outpatient rates, representing an increase of .58% in its overall rates. Both Bayview and the Commission concurred with this recommendation and it became effective on May 4, 2003.

Findings and Recommendations

Pursuant to Chapter 33, staff has reviewed the status of trauma physician standby and incremental MIEMMS regulatory costs in Maryland hospital rates. Below is a summary of the activities of the staff to date in accomplishing the tasks laid out in Chapter 33.

- Established a workgroup consisting of representatives of each Maryland trauma center and conducted numerous meetings with representatives of the Maryland Hospital Association (MHA) and individual hospitals on obtaining data and information on standby and MIEMSS costs at Maryland trauma centers;

- **$** Reviewed Medicare Regulations and the Medicare Provider Reimbursement Manual and consulted with CMS and industry representatives on the manner in which Medicare handles standby costs for non-prospective payment system (non-PPS) hospitals;

- **$** Coordinated with the MHA to conduct surveys on standby costs and MIEMSS regulatory costs - the first focused generally on on-call and standby costs and the second concentrating more specifically on standby and MIEMSS regulatory costs;

- **$** Coordinated with representatives of MIEMMS on trauma regulatory requirements;

- **$** Recognized that designated trauma centers incur costs over an above other hospitals due to regulatory mandates and added $1.27 million in Johns Hopkins Bayview Medical Centers= outpatient rate structure during its full rate review for trauma costs previously not recognized; and

- **$** Proposed recommendations to the Commission.

Based on the recommendations proposed by staff, on February 4, 2004 the Commission adopted the following policies regarding standby costs and MIEMSS regulatory costs at Maryland trauma centers.

Standby Costs

1. Under Medicare regulations, CMS considers ED physician standby costs as Part A costs for reimbursement purposes and uses reasonable compensation equivalents to cap the allowance of such costs for certain hospitals outside of Maryland. This policy applies to cost reimbursed (non-PPS) hospitals and certain units of PPS hospitals such as outpatient departments and psychiatric approved prior to full implementation of the OPPS and Psychiatric PPS. Staff finds that, except for hospitals that have been granted such costs through a full rate review (ie. Bayview), trauma standby costs are not included as Part A costs in Maryland hospitals base rates.

   The final standby cost data submissions were received from the hospitals with trauma centers on December 22, 2003. Johns Hopkins Bayview was not included in this analysis since their standby costs were recognized in their last full rate review and University of Maryland Medical Center and Peninsula Regional Medical Center did not report standby costs.

   There was considerable discussion in the workgroup as to whether the RCE used by Medicare as a reasonableness limit for ED physicians under certain circumstances is appropriate for trauma physicians in Maryland. Concerns were raised as to whether the RCE level should be set higher for trauma physicians. Very little data is available to determine the difference in compensation, particularly for availability costs, between similar ED and trauma physicians. The workgroup looked at data from the Medical Group Management Association (MGMA) and

noted that there were differences. The differences however, varied by specialty and by year, and in most cases the sample sizes were very small. The survey showed only national data and did not reveal Maryland or regional compensation levels. In fact, no data were available for trauma physicians in a MGMA survey. Once Maryland survey data was provided by the hospitals and the RCE was applied, most of the physician compensation costs reported were lower than the calculated RCE limit. As a result, staff finds that, in general, the RCE established by Medicare for ED physicians is set at a level that is not too low to apply to trauma physicians.

Staff also requested that the trauma hospitals specify how physician malpractice costs reported as part of the trauma survey are reported in HSCRCs Annual Report of Revenue, Expenses and Volumes. If any physician malpractice costs are reported as regulated costs in the UA schedule of the Annual Report and included in the RCE calculation, the hospitals rates would reflect these costs twice.

The Commission adopted staff recommendations to include an amount in rates, effective July 1, 2004, for trauma standby costs that reflect the lesser of the actual standby costs reported in FY 2003 for Trauma Surgeons, Orthopedic Surgeons, Neurosurgeons and Anesthesiologists and the adjusted RCE (using the schedule adopted by Medicare effective January 1, 2004) as calculated under 2109 of the Medicare Reimbursement Manual. The total amount to be included in rates of all trauma center hospitals based on the survey data is $4,034,461 (see Attachment IV) plus an appropriate update factor to price level forward the FY 2003 data to July 1, 2004.

Staff also recommends that the determination of actual availability costs and the RCE limit under this methodology shall not include any physician malpractice costs that are reported in the UA schedule in the Commission's Annual Report.

2. Several hospitals reported standby costs for certified registered nurse anesthetists (CRNAs), in lieu of paying availability expenses for an anesthesiologist. The question arose as to whether CRNA trauma standby costs should be allowable as Part A costs. There are no categories for CRNAs under the RCE schedule adopted by Medicare so a reasonable allowable limit is not readily available. In order to establish an RCE limit for CRNAs, it is reasonable to use the RCE for anesthesiologists as a base and make an adjustment based on a comparison of CRNA and anesthesiologist salaries. Since CRNA information is not available in the HSCRC wage and salary survey data, external data sources were used as well as some information reported from several hospitals. An analysis of data available from various data sources can be found in Attachment V. Each data source has weaknesses and survey issues, so the attached analysis reflects the median (46.4%) of the percentages of CRNA's salaries compared to Anesthesiologist salaries based on the various surveys.

The Commission recognizes that the utilization of CRNAs in trauma centers promotes efficiencies in the provision of trauma care. Therefore, the Commission will recognize

a reasonable amount of availability costs associated with the use of CRNAs at a trauma center. The RCE level for CRNAs will be set at 46.4% of the RCE level established in Medicare regulations for Anesthesiologists in determining the amount that should be included in rates for CRNAs.

Incremental MIEMSS Regulatory Costs

1. Several of the ICGs used in the ICC and ROC have hospitals with and without trauma centers. For example, of the sixteen hospitals in the Suburban & Rural I ICG, four have trauma centers (Memorial of Cumberland, Peninsula Regional Medical Center, Suburban Hospital and Washington County Hospital). Of the eight hospitals in the Urban I group, three have trauma centers (Johns Hopkins Bayview, Prince George's Hospital Center and Sinai Hospital). Of the seven hospitals in the Urban II group, five have trauma centers (Johns Hopkins Bayview, Johns Hopkins Hospital, Prince George's Hospital Center, Sinai Hospital, University of Maryland Hospital).

   In order to perform an adequate comparison under the ICGs that include hospitals with trauma centers, it is necessary to distinguish between the incremental costs associated with operating the trauma center and the costs normally associated with operating a department in a hospital that does not have an associated trauma center (such as an ED or OR). The workgroup worked with MIEMSS to determine what MIEMSS regulatory requirements represent costs that are truly above and beyond the reasonable expectation of an efficient and effective hospital that does not have a trauma center. The workgroup established categories of such costs and issued a survey to obtain information on those costs by trauma center.

   The Commission finds that incremental MIEMSS regulatory costs are either Part A costs currently in rates or are considered Part B costs and should not be included in rates. However, the ICC/ROC methodologies do not reflect the Part A costs associated with the incremental MIEMSS regulatory costs and an adjustment to the CPCs used in the ICC/ROC should be made to reflect these systematic differences in costs between trauma center hospitals and non-trauma center hospitals. The adjustment should be made as a direct strip similar to that made for direct medical education costs, i.e. the salary expenses of resident and interns at teaching hospitals.

   Therefore, applicable to the April 2004 ROC and any Full Rate Reviews filed after the final approval of these recommendations, an amount shall be included in the direct strip for hospitals with trauma centers that reflects incremental MIEMSS regulatory costs. The total amount to be included as a direct strip for trauma costs in the April 2004 ROC/ICC is $11,264,416 (see attachment VI). Future ROCs should be inflated by the update factor applied to rates effective on the previous July 1.

The direct strip should reflect the incremental costs associated with the following:

- **Trauma standby costs (with the RCE applied) as calculated under recommendations #1 and #2 under the "Standby Costs" section of this report;**
- **Trauma Director;**
- **Trauma Department;**
- **Trauma Protocol;**
- **Specialized Trauma Staff;**
- **Education and Training Costs; and**
- **Special Equipment Needs.**

The total direct strip amount for Level II and Level III hospitals shall reflect 75% of the hospital's permissible incremental MIEMSS costs as reported and approved by the Commission and 25% of the average of such costs for the trauma centers that operate at the same level as the subject hospital. For the Johns Hopkins trauma center (Adult and Pediatric – Level I), the direct strip shall be the amount reported to the Commission for FY 2003.

The 75%/25% ratio is reasonable since

- the data sample is small with only 3 hospitals in each level;
- hospitals have reported costs in different costs centers; and
- it reflects the high level of fixed costs in trauma services.

The designated level for each Maryland trauma center is listed below:

- PARC and Level I – Shock Trauma (UMMS), and Johns Hopkins
- Level II – Johns Hopkins Bayview, Prince George's Medical Center, Sinai Hospital, and Suburban Hospital
- Level III – Memorial of Cumberland, Peninsula Regional, and Washington County

In the surveys, most hospitals reported on-call costs that are over and above what they are recovering under Senate Bill 479. The legislation specifies that trauma centers may recover from the fund the lesser of actual on-call costs for trauma physicians (Trauma Surgeons, Orthopedic Surgeons, Neurosurgeons, and Anesthesiologists, as appropriate by level) and an amount derived from a formula based on the CMS RCE limits. The estimated RCE limit is $500,000 for Level II centers and $950,000 for Level III centers. MHCC estimates that about $2 million will be expended from the fund for Level II on-call costs and $3 million for Level III on-call costs.

The Commission acknowledges that all on-call costs are not recoverable under the trauma legislation but finds that the legislative on-call limit is reasonable and that the types of physicians reimbursed for on-call costs are appropriate. Therefore, the policy above excludes reported "additional physician costs" and "inadequate physician funding" costs.

2. Data will need to be collected on both standby costs and incremental MIEMSS regulatory costs on a regular basis so that the direct strip can but updated when necessary.

Trauma hospitals must report their standby costs and incremental MIEMSS regulatory costs, as specified by Commission staff, with the Annual Report of Revenue, Expenses and Volumes. To verify data submissions, staff may request information to verify costs such as, but not limited to:

- **A copy of the contract between the hospital and the physician(s).**
- **A written copy of the allocation agreement and supporting data depicting the distribution of the physician's time among services to the provider, and services to individual patients.**
- **A record of the amount of time the physician was physically present on the hospital premises to attend to trauma patients.**

Any data reported to the Commission pursuant to the policy set forth in this paper, including but not limited to, the reporting of physician availability, physician malpractice, and incremental MIEMSS regulatory costs, may be subject to audit.

Guidelines for Payment of Standby costs to Children's National Medical Center

In Chapter 33, the General Assembly requires the HSCRC to establish guidelines for the payment of standby costs from the Maryland Trauma Physicians Fund to Children's National Medical Center not to exceed $275,000. The Commission, received data from Children's on billings and payments for trauma care provided to Maryland residents. The data show that the standby costs associated with trauma care recorded in the Maryland trauma registry far exceeded the $275,000 limit imposed by the General Assembly. Therefore, the Commission expects that when actual data is available on these costs, the amount provided to Children's from the Trauma Physicians Fund will be capped at the statutory limit of $275,000.

The MHCC and the HSCRC will impose guidelines that will require Children's National Medical Center to report biannually on their standby costs. The form and content of the MHCC report will be similar to what will be required for on-call costs at the Maryland trauma centers. The effective date for recovery of standby costs will be identical to the effective date for Maryland hospitals - July 1, 2004. The first standby costs payment application from Children's National Medical Center will be due to the MHCC by January 31, 2005 for the period July 1, 2004 through December 31, 2004.

ATTACHMENT I

2109. REIMBURSEMENT OF HOSPITAL EMERGENCY DEPARTMENT SERVICES WHEN PHYSICIANS RECEIVE COMPENSATION FOR AVAILABILITY SERVICES

2109.1 General.--Wide variations can occur in the utilization of hospital emergency department services and hospitals cannot always schedule physician staffing at a level commensurate with the actual volume of services rendered. As a result, emergency department physicians may spend a portion of their time in an availability status awaiting the arrival of patients. Alternatively, hospitals may need to arrange for emergency department physician coverage for evenings, weekends or holidays, when staff or community physicians are not available. Since these periods frequently generate inadequate physician revenue through charges for professional services due to lower utilization, hospitals may have to offer physicians supplemental compensation or minimum compensation guarantees to secure coverage of emergency departments.

When emergency department physicians are compensated on an hourly or salary basis or under a minimum guarantee arrangement (§2109.2E) providers may include a reasonable amount in allowable costs for emergency department physician availability services subject to limitation through the application of Reasonable Compensation Equivalents (RCEs). Availability costs will be recognized only in the emergency department of a hospital, and only as described in this section.

2109.2 Definitions.--

A. Physician Availability Services.--Physician availability services consist of the physical presence of a physician in a hospital under a formal arrangement with the hospital to render emergency treatment to individual patients as and when needed.

B. Reasonable Compensation Equivalent.--A Reasonable Compensation Equivalent (RCE) is the limitation on the cost which a provider can claim for compensation of services furnished by physicians to providers. At present, the RCEs apply only to services which are reimbursable on a reasonable cost basis. The limitation is expressed as a dollar amount for a full work year of 2080 hours ("work-year hours"), and is published in the Federal Register. It is differentiated by physician specialty with variations for rural areas, metropolitan areas of less than 1,000,000 population, and metropolitan areas of greater than 1,000,000 population. Details on the RCE limitation are provided in §2182.6, Conditions of Payment for Costs of Physicians' Services to Providers.

C. RCE Base.--The RCE base is the physician compensation amount that the program will recognize for provider services and availability services, whether compensation for availability services is calculated under an hourly rate or salary arrangement, or based on a minimum guarantee amount calculated for a specified number of direct patient care service hours under a minimum guarantee arrangement. The RCE base is determined by applying the RCE limitation to the provider services, availability services or direct patient care services hours specified in the applicable provider/physician allocation agreement.

D. Adjusted RCE Base.--The RCE base amount may be adjusted to reflect the addition of allowances for the costs of physician membership in professional associations,

continuing medical education and malpractice insurance. The allowance for membership in professional associations and continuing medical education is limited to the lesser of actual cost or 5 percent of the applicable RCE base amount. The allowance for malpractice insurance is limited to the proportionate share of actual reasonable physician malpractice insurance cost attributable to the provider services, availability services or direct patient care services hours (under a minimum guarantee arrangement) subject to the RCE limitation.

E. Minimum Guarantee Arrangement.--A minimum guarantee arrangement is a financial arrangement between a physician or a group of physicians and a provider where the physician(s) is (are) guaranteed a minimum level of compensation (the minimum guarantee amount) for availability services. The physician(s) may receive more than the minimum amount guaranteed if they generate charges for services to individual patients in excess of the minimum guarantee amount. If the charges fall short of the minimum guarantee amount, the provider is obligated to pay the physician(s) the difference to make up the guaranteed amount. A minimum guarantee arrangement may also contain provisions for compensating physicians for performing provider services such as supervision of the emergency department, administration, etc.

F. Unmet Guarantee Amount.--An unmet guarantee amount is the amount by which the minimum guarantee amount exceeds total physician charges for services to individual patients during the cost reporting period. Total physician charges include imputed charges for services performed but not billed. Total physician charges, not collections, must be included in the computation.

2109.3 Allowability of Emergency Department Physician Availability Services Costs.--Emergency department physician availability services costs will be allowable only in special circumstances, as follows:

A. No Feasible Alternative Way to Obtain Physician Coverage is Available.-In order for physician availability services costs to be allowable, the provider must demonstrate that it explored alternative methods for obtaining physician coverage but was unable to do so. An alternative might include negotiating a straight fee-for-service arrangement. Evidence of such an effort could consist of advertisements for emergency physicians, to be compensated on a fee-for-service basis, placed in appropriate professional publications. It is not necessary for a provider to demonstrate that it explored alternative methods for obtaining emergency physician coverage annually. The requirement is applicable prior to the renegotiation of expiring arrangements or the initiation of new arrangements for physician coverage of the emergency department.

B. Physicians Provide Immediate Response to Life-Threatening Emergencies.-The physician must be on the hospital premises in reasonable proximity to the emergency department. The physician cannot be "on call."

C. Documentation.--A claim for Part B hospital costs or Part A and Part B hospital costs must be supported by the following data maintained by the hospital:

1. A signed copy of the contract between the hospital and the physician(s).

2. A written copy of the allocation agreement and supporting data depicting the distribution of the physician's time between services to the provider, services to individual patients and services not reimbursable under Medicare.

3. A permanent record of payments made to the physician(s) under the agreement.

4. A record of the amount of time the physician was physically present on the hospital premises to attend to emergency patients.

5. A permanent record of all patients (Medicare and non-Medicare) treated by the physician, copies of all physician bills generated for such services and a record of imputed charges for services for which no billing was made by the hospital or physician.

6. A schedule of physician charges.

7. Evidence that the provider explored alternative methods for obtaining emergency physician coverage before agreeing to physician compensation for availability services.

2109.4 Methodology for Determining Allowable Emergency Physician Availability Service Costs --

A. General.--When a provider compensates emergency physicians for being available to render physician services to individual patients in the emergency department, the provider may be reimbursed Medicare's share of the allowable costs incurred by the provider to the extent that the costs are determined reasonable. Provider reimbursement will be based on the lesser of the actual compensation paid to the physician or the reasonable compensation determined through the application of the RCE limits to the hours of emergency department availability stipulated in the approved provider/physician allocation agreement. If the required allocation agreement does not specify the availability services hours for which the provider compensates the physician, availability services costs will not be allowable unless the conditions of §2109.4 C. are met with respect to minimum guarantee arrangements.

The limit on allowable cost for a physician's services to the provider is calculated by dividing the total hours of services to the provider (including both availability and provider services) by 2,080 "work-year hours" and multiplying the result by the applicable RCE limit to determine the RCE base. The RCE base may be increased by the lesser of actual costs or 5 percent of the RCE base to reflect costs incurred by the provider for emergency physicians' membership in professional associations and continuing medical education. Additionally, the RCE base may be increased to reflect an allowance for the proportionate share of actual reasonable physician malpractice insurance cost incurred by the provider.

Emergency physician availability services costs are reimbursable under Part A if attributable to inpatient services and Part B if attributable to outpatient services in the emergency department. Both are processed by the Part A intermediary. The costs should be included in the emergency department cost center. The portion of the cost attributable to emergency physician services rendered in the inpatient routine areas should then be reclassified from the emergency department cost center to the inpatient routine cost center on the cost report. The allocation to the inpatient routine cost center is accomplished by dividing emergency department physician charges for inpatient routine emergencies by total emergency department physician charges and applying the result to allowable availability services cost as follows:

$$\frac{\text{Emergency Department Physician Charges for I/P Routine Areas}}{\text{Total Emergency Department Physician Charges (Billed and Imputed)}} \times \text{Allowable Availability Services Cost} = \text{Inpatient Availability Services Costs}$$

When a contract requires the physician to render duties other than direct patient care services, such as teaching, administrative, supervising technical personnel, which are of general benefit to all patients, and the hospital incurs allowable physician compensation costs for such activities, these costs will be allocated between the Part A and Part B programs in the same ratio that the inpatient charges and the outpatient charges for the emergency department bear to total charges. Where the hospital is reimbursed under the prospective payment system, the Part A inpatient costs are reimbursed on the basis of the DRG payment.

B. Allowable Availability Service Costs Under Hourly Rate or Salary Arrangements.--Where the agreement between a provider and emergency physician specifies that payment for availability services will be made on an hourly rate or salary basis, the provider will be reimbursed Medicare's share of incurred physician availability services costs subject to the RCE limitation. The following illustration demonstrates the methodology for determining allowable emergency physician compensation costs when the physician is compensated on an hourly rate or salary basis for availability, supervisory and administrative services.

ILLUSTRATION

Dr. A agrees to work in the emergency department of XYZ Hospital providing general emergency department physician services on weekends, holidays and evenings. The hospital agrees to compensate Dr. A at the rate of $20 per hour for emergency physician availability services, supervisory and administrative duties. The hospital also agrees to pay $250 towards the cost of Dr. A's membership in professional associations, $1,500 for continuing medical education costs and $4,000 of Dr. A's annual malpractice insurance cost. Dr. A bills and retains all professional fees. He has agreed not to bill for services rendered to hospital inpatients and employees. The allocation agreement developed by XYZ Hospital and Dr. A indicates that Dr. A will expend his time, for which he is compensated by the hospital, as follows:

	Percentage
Availability Services	50%
Supervision and Administrative Services	50%
TOTAL	100%

During the year Dr. A renders 300 hours of supervisory, administrative and availability services, bills $29,000 in professional fees, furnishes the equivalent of $1,000 in emergency services to hospital inpatients and $2,000 in emergency services to hospital employees, is compensated $3,000 for supervisory and administrative services, and receives additional compensation of $3,000 for availability services. The compensated hours worked by Dr. A are allocated as follows:

	Hours
Availability Services (50% of 300)	150
Supervisory and Administrative Services (50% of 300)	150
TOTAL	300

The reasonable cost of the supervisory, administrative and availability services time is computed as follows:

1. Determine the Applicable RCE Base

Total Hours (Supervisory, Administrative and Availability Services) / Work Year Hours (2080)		RCE (for illustrative purposes we selected the 1983 RCE/ Total figure for non-metropolitan areas)	=	RCE Base
	x			
300/2080	X	$87,600	=	$12,635

2. Determine the Limit on the Allowance for Membership in Professional Associations and Continuing Medical Education

RCE Base				Limit
$12,635	X	.05	=	$632

9. Determine the Limit on the Allowance for Membership in Professional Associations and Continuing Medical Education

RCE Base			=	Limit
$37,904	X	.05	=	$1,895

10 Determine Actual Provider Payment for Membership in Professional Associations and Continuing Medical Education Applicable to Professional and Availability Services

Total Hours (Professional and Availability Services) / Total Hours Worked		Total Payments for Membership in Professional Associations and Continuing Medical Education		
900/1000	X	$3,000	=	$2,700

11. Determine the Allowance for Malpractice Insurance (Professional and Availability Services)

Total Hours (Professional and Availability Services) / Total Hours Worked		Total Payment for Malpractice Insurance		
900/1000	X	$5,000	=	$4,500

12. Adjusted RCE Base (Sum of #8 ($37,904) + the Lesser of #9 or #10 ($1,895) + #11 ($4,500)) $44,299

13. Actual Minimum Guarantee Amount $50,000

14. Reasonable Minimum Guarantee Amount (Lower of #12 or #13) $44,299

15. Total Charges $32,000

Billed Charges	$ 29,000
Imputed Inpatient Charges	1,000
Imputed Employee Charges	2,000

4. Determine the Allowance for Malpractice Insurance (Supervision and Administration)

Supervisory and Administrative Hours / Total Hours Worked	X	Total Payment for Malpractice Insurance		
100/1000	X	$5,000	=	$500

5. Adjusted RCE Base for Supervision and Administrative Services (Sum of #1 ($4,212) + the Lesser of #2 or #3 ($211) + #4 ($500)) $4,923

6. Determine Provider Payments Attributable to Supervision and Administrative Services $2,800

Supervision and Administration (100 hours X $20)		$2,000
Membership in Professional Associations	(100/1000 X $500)	50
Continuing Medical Education	(100/1000 X $2500)	250
Malpractice Insurance Premiums	(100/1000 X $5000)	500
		$2,800

7. Amount Includable in Allowable Costs (Lower of #5 or #6) $2,800

Computation of Reasonable Allowable Costs for an Unmet Guarantee Amount

8. Determine the Applicable RCE Base

Total Hours (Professional and Availability Services) / Work-Year Hours (2080)	X	RCE (for illustrative purposes we selected the 1983 RCE/ Total figure for non-metropolitan areas)	=	RCE Base
900/2080	X	$87,600	=	$37,904

During the year Dr. X bills $29,000 in professional fees, furnishes the equivalent of $1,000 in professional services to hospital inpatients and $2,000 in professional services to hospital employees. Dr. X is compensated $2,000 for supervisory and administrative services, and $21,000 for an unmet guarantee amount. The hours worked by Dr. X are allocated as follows:

	Hours
Professional Services to Individual Patients and Availability Services	900 (90% of 1,000)
Supervision and Administrative Services	100 (10% of 1,000)
TOTAL	1,000

Computation of Reasonable Allowable Cost for Supervisory and Administrative Duties

1. Determine the Applicable RCE Base

Total Hours (Supervisory and Administrative Services) / Work Year Hours (2080)	X	RCE (for illustrative purposes we selected the 1983 RCE/ Total figure for non-metropolitan areas)	=	RCE Base
100/2080	X	$87,600	=	$4,212

2. Determine the Limit on the Allowance for Membership in Professional Associations and Continuing Medical Education

RCE Base	X	.05	=	Limit
$4,212	X	.05	=	$211

3. Determine Actual Provider Payment for Membership in Professional Associations and Continuing Medical Education Applicable to Supervisory and Administrative Services

Total Hours (Supervisory and Administrative Services) / Total Hours Worked	X	Total Payments for Membership in Professional Associations and Continuing Medical Education	=	
100/1000	X	$3,000	=	$300

C. Allowable Unmet Guarantee Amounts Under Minimum Guarantee Arrangements.--The allowable cost of an unmet guarantee amount is determined by subtracting total charges for physician services to individual patients from the lesser of (1) the minimum guarantee amount specified in the provider/physician arrangement or (2) the reasonable compensation amount which is arrived at by applying the RCE limits (as adjusted for any appropriate additional allowances) to the physician's total hours allocated for individual patient care. The charges billed by or for the physician must be appropriate to the patient care services rendered and not merely token charges. If the agreement between the provider and physician restricts the physician from billing charges for designated groups of patients (e.g., inpatients, provider employees), charges for such services must be imputed, and included in the total physician charge figure. Total physician charges (billed and/or imputed) must be used in this computation whether or not collected. When physicians are required to perform services which are of general benefit to all provider patients, as well as direct patient care services, under a minimum guarantee arrangement, the RCE limits are applied separately in determining the allowable costs of the unmet guarantee amount and compensation for provider services such as administration or supervision. If the provider also incurs costs for physician membership in professional associations, continuing medical education and malpractice insurance premiums, such costs are allocated between provider payments for unmet guarantee amounts and provider payments for physician compensation for provider services on the basis of the respective ratios of allocated direct patient care service hours and provider service hours to total hours worked. This allocation is necessary in order to determine the provider's actual payments for unmet guarantee amounts and physician compensation for provider services. Allowable unmet guarantee costs are reimbursable under Part A if attributable to inpatient services and Part B if attributable to outpatient services in the emergency department and are processed by the Part A intermediary. The costs for an unmet guarantee amount should be allocated between Part A and Part B in the same manner as those for availability services compensated under hourly rate or salary arrangements. (See §2109.4A.)

ILLUSTRATION

Dr. X contracts to work 1,000 hours during the year in the emergency department of ABC Hospital providing general emergency department physician services on weekends, holidays and evenings. ABC Hospital guarantees Dr. X $50,000 in charges for physician services to individual patients and agrees to compensate Dr. X at the rate of $20 per hour for supervisory and administrative duties. The hospital also agrees to pay $500 for the cost of Dr. X's membership in professional associations, $2,500 for continuing medical education and $5,000 of Dr. X's annual malpractice insurance cost. Dr. X bills and retains all professional fees. He has agreed not to bill for services he renders to inpatients and employees of the hospital. The allocation agreement developed by ABC Hospital and Dr. X indicates that Dr. X will expend his time as follows:

	Percentage
Professional Services to Individual Patients (includes inpatients and employees) and Availability Services	90%
Supervision and Administrative Services	10%
TOTAL	100%

3. Provider Payments for Membership in Professional Associations and Continuing Medical Education = $1,750
($250 Membership in Professional Associations + $1,500 Continuing Medical Education)

4. Malpractice Insurance Expense = $4,000

5. Adjusted RCE Base = $17,267
(Sum of #1 ($12,635) + the Lesser of #2 or #3 ($632) + #4 ($4,000))

6. Actual Provider Payments

Supervision and Administration	$ 3000	
Availability	3000	
Membership in Professional Associations	250	
Continuing Medical Education	1500	
Malpractice	4000	
		$11,750

7. Amount Includable in Allowable Costs = $11,750
(Lesser of #5 or #6)

8. Allocation of Allowable Costs

Billed Charges (Emergency Department)	$29,000
Imputed Employee Charges	2,000
Total Outpatient Charges	$31,000
Imputed Inpatient Charges	1,000
Total Charges	$32,000

Outpatient Charges / Total Charges	X	Allowable Provider Costs	=	Allowable Part B Costs
31,000 / 32,000	X	$11,750	=	$11,383
Inpatient Charges / Total Charges	X	Allowable Provider Costs	=	Allowable Part A Costs
1,000 / 32,000	X	$11,750	=	$367

16. Reasonable Unmet Guarantee Amount (#14 Less #15) $12,299

17. Summary of Allowable Provider Costs *$15,099

Supervisory and Administrative Svcs	$ 2,800
Reasonable Unmet Guarantee Amount	12,299
	$ 15,099

*Total allowable provider costs of $15,099 are allocated between Part A and Part B in the same manner as the preceding example.

Trauma Standby Costs for YE June 30, 2003 **Attachment II**

Hourly or Salary Based Arrangements (Payroll Based)

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10	Column 11
SPECIALTY	Total Trauma Hours	Availability Hours	Superv. & Admin. Hours	Payments for Availability	Payments for Superv. & Admin.	% Inpat. Hours	% Outpat Hours	Prof. Org. Membership	CME Costs	Malpractice Insurance	Total Trauma Standby Costs
Trauma Surgeon I. II.											
Orthopedic Surgeon I. II.											
Neurosurgeon I. II.											
Anesthesiologist [Designated to Trauma] I. II.											

Minimum Guaranteed Arrangment (Contract Based)

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10	Column 11	Column 12
SPECIALTY	Total Trauma Hours	Availability Hours	Superv. & Admin. Hours	Act. Min. Guarantee Amt	Payments for Superv. & Admin.	% Inpat. Hours	% Outpat Hours	Prof. Org. Membership	CME Costs	Malpractice Insurance	Total Trauma Standby Costs	Profess. Serv. Billed (Paid)
Trauma Surgeon I. II.												
Orthopedic Surgeon I. II.												
Neurosurgeon I. II.												
Anesthesiologist [Designated to Trauma] I. II.												

Attachment II (cont'd)

Trauma Standby Reporting
(Revised 11/14/03)

Specify the type of arrangement for each physician - Whether arrangement is based on an hourly rate or salary, or on a minimum guarantee.

I. Standby Schedule Instructions - Hourly or Salary Based Arrangements (Payroll Based) (Hospital bills for Part B professional services)

Column 1 - Total Trauma Hours
Report the total number of hours the physician provides under a formal arrangement with the trauma center for availability, supervision and administrative services directly related to trauma. This amount shall be the sum of the Aavailability hours@ column #2 and the Asupervision and administration hours@ column #3.

Column 2 - Availability Hours
Report the total number of hours the physician provides under a formal agreement with the trauma center for availability services. Availability services require the physical presence of the trauma physician in the hospital to render trauma services to patients when and as needed. The physician must be on the hospital premises within reasonable proximity to the trauma center. AOn-call@ hours and hours for which the physician or the hospital otherwise received reimbursement should not be reported in this column. Do not include hours that the physician spends treating patients, i.e., providing billable Part B professional services to individual patients.

Column 3 - Supervision and Administrative Hours
Report the total number of hours the physician provided supervision and administrative services to the trauma center under a formal arrangement. AOn-call@ hours and hours for which the physician or the hospital otherwise received reimbursement should not be reported in this column.

Column 4 - Payments for Availability
Report the total actual payments made to the physician under a formal arrangement to provide availability services to the trauma center. Payments for Aon-call@ services should not be reported in this column. Payments reported in this column shall be reduced by any reimbursement amounts the physician or hospital otherwise received for the provision of availability services to the trauma center.

Column 5 - Payments for Supervision and Administration
Report the total actual payments made to the physician under a formal arrangement for supervision and administration services to the trauma center. Payments for AOn-call@services should not be reported in this column. Payments reported in this column shall be reduced by any reimbursement amounts the physician or hospital otherwise received

for the provision of supervision and administration services to the trauma center.

Column 6 - Percent Inpatient
Report the percent of all trauma cases at the trauma center reported on the State Trauma Registry which result in an inpatient stay.

Column 7 - Percent Outpatient
Report the percent of all trauma cases at the trauma center reported on the State Trauma Registry which do not result in an inpatient stay.

Column 8 - Professional Organization Membership
Report the total membership fees paid by the hospital on behalf of the physician for membership in trauma-related professional organizations.

Column 9 - Continuing Medical Education Costs
Report the total amount paid on behalf of the physician for required trauma-related continuing medical education.

Column 10 - Malpractice Insurance
Report the total premiums paid by the hospital on behalf of the physician for the provision of trauma services.

Column 11 - Total Trauma Standby Costs
Report the total of column #4, Payments for Availability, column #5 Payments for Supervision and Administration, column #8, Professional Organization Membership, column #9, Continuing Medical Education Costs, and column #10, Malpractice Insurance.

II. Standby Schedule Instructions - Contract Based/Minimum Guarantee Arrangements (Physician bills for Part B professional services)

Column 1 - Total Trauma Hours
Report the total number of hours the physician provides under a formal arrangement with the trauma center for availability, supervision and administrative services directly related to trauma. This amount shall be the sum of the Aavailability hours@ column #2 and the Asupervision and administration hours@ column #3.

Column 2 - Availability Hours
Report the total number of hours the physician provides under a formal agreement with the trauma center for availability services. Availability services require the physical presence of the trauma physician in the hospital to render trauma services to patients when and as needed. The physician must be on the hospital premises within reasonable proximity to the trauma center. AOn-call@ hours and hours for which the physician or the hospital otherwise received reimbursement should not be reported in this column. *Do not exclude* hours that the physician spends treating patients, i.e., providing billable Part B

professional services to individual patients.

Column 3 - Supervision and Administrative Hours
Report the total number of hours the physician provided supervision and administrative services to the trauma center under a formal arrangement. AOn-call@ hours and hours for which the physician or the hospital otherwise received reimbursement should not be reported in this column.

Column 4 - Minimum Guarantee Amount
Report the total amount of charges billed (or payments received) for physicians professional services to individual patients guaranteed to the physician under the arrangement with the hospital.

Column 5 - Payments for Supervision and Administration
Report the total actual payments made to the physician under a formal arrangement for supervision and administration services to the trauma center. Payments for AOn-call@services should not be reported in this column. Payments reported in this column shall be reduced by any reimbursement amounts the physician or hospital otherwise received for the provision of supervision and administration services to the trauma center.

Column 6 - Percent Inpatient
Report the percent of all trauma cases at the trauma center reported on the State Trauma Registry which result in an inpatient stay.

Column 7 - Percent Outpatient
Report the percent of all trauma cases at the trauma center reported on the State Trauma Registry which do not result in an inpatient stay.

Column 8 - Professional Organization Membership
Report the total membership fees paid by the hospital on behalf of the physician for membership in trauma-related professional organizations.

Column 9 - Continuing Medical Education Costs
Report the total amount paid on behalf of the physician for required trauma-related continuing medical education.

Column 10 - Malpractice Insurance
Report the total premiums paid by the hospital on behalf of the physician for the provision of trauma services.

Column 11 - Total Trauma Standby Costs Incurred by Hospital
Report the total trauma standby costs incurred by the hospital. Report the total of column #4, Minimum Guaranteed Amount, column #5 Payments for Supervision and Administration, column #8, Professional Organization Membership, column #9, Continuing Medical Education Costs, and column #10 Malpractice Insurance.

Column 12 - Physicians= Professional Services Billed (or Payments Received)
Report the total amount of charges billed (or payments received) for physician professional services to individual patients as specified in the arrangement with the hospital.

III. Attach with Schedule:

Evidence of No Feasible Alternative - In order for physician availability costs to be allowable, the hospital must demonstrate that it explored alternative methods for obtaining physician coverage but was unable to do so. An alternative might include negotiating a straight fee-for-service arrangement. Evidence of such an effort might include advertisements for emergency physicians to be compensated on a fee-for-service basis, placed in appropriate professional publications.

Itemization of Professional Organization Membership Fees - Itemized list of trauma-related membership fees paid by the hospital on behalf of the physician including a physician identifier, the amount paid to each organization, and the name of each organization.

Itemization of Fees Paid for Continuing Medical Education - Itemized list of fees paid on behalf of the physician for continuing medical education including a physician identifier, the amount paid to each organization, the course of instruction for each, and the organization providing the instruction.

Itemization of Malpractice Premiums - Proof of malpractice premiums paid on behalf of the physician for trauma related services including the amount paid, a physician identifier, the type of insurance rendered, and the insurer.

IV. To be made available to Commission Upon Request:

- **$ A signed copy of the contract between the hospital and the physician(s).**
- **$ A written copy of the allocation agreement and supporting data depicting the distribution of the physician=s time among services to the provider, services to individual patients, and services not reimbursable under Medicare.**
- **$ A permanent record of payments made to the physician(s) under the agreement.**
- **$ A record of the amount of time the physician was physically present on the hospital premises to attend to emergency patients.**
- **$ A permanent record of all patients treated by the physician, copies of all physician bills generated for such services, and a record of imputed charges for services for which no billing was made by the hospital or physician.**
- **$ A schedule of physician charges.**

Attachment III A

Trauma Survey-- Hospital Summary
Hospital:
Level:

	Amount	
Trauma Director		(Self Explanatory- No Subschedule)
Trauma Department		
Trauma Protocol		
Specialized Trauma Staff		
Education and Training Cost		
Special Equipment Needs		
Additional Physician Cost		
Inadequate Trauma Bill Funding		
	total	

Trauma Department

Attachment III B

Purpose - Trauma coordinator and associated costs.
A trauma coordinator monitors and coordinates the components of the trauma program, including: patient care, provider education, public education and prevention activities, trauma registry, quality, and program management.

Costs	Amount
Salary	
Trauma Coordinator	
Trauma Registrar(s)	
Benefits	
Office Supplies	
Books and Periodicals	
Furnishings (non-capital)	
Luncheons and Refreshments	
Host trauma meetings	
In-house training	
Photocopies	
Technical and Professional Fees	
Trauma Committee	
Dues/Licenses	
Software Support	
American Trauma Society (ATS)	
Trauma Network	
Site visit every five years	
Travel and Registration; Courses, Seminars	
Trauma network meetings	
Trauma coordinator meetings	
Required CME courses	
Other: (List)	
Personnel Support Service	
total	

Attachment III C

Trauma Protocol

Purpose: To cover the incremental cost of staff who respond to trauma as opposed to normal E/R operation.

Costs:	Amount
Respiratory Therapist	
Lab Technician	
Radiology Techs	
ED Nurse	
ED Tech	
OR/Anesthesia Tech	
Trauma Recorder (RN)	
Social Worker	
Nurse Manager	
Patient Access Registrar	
Other: (List)	
total	

Specialized Trauma Staff

Attachment III D

Purpose - To cover the incremental costs of non-physician staffing in various departments

Costs	Amount
24/7 ICU Critical Care Coverage	
SICU Director	
Nurse	
Surgical Tech	
Radiology Tech	
Nursing	
Nurses (on call and call back)	
E.D. room nursing	
Trauma nurse practitioner	
OR Nursing Assistant	
Tech Staff	
Physician assistant	
E.D. Tech Staff	
OR Associate	
Surgical Tech	
Clinical Tech	
Social Work	
Emergency room social worker	
Peds trauma social worker	
Other Staff	
Emergency room supply manager	
Instrument Processor	
OR Scheduler	
Inventory Management Clerk	
Linen Delivery Worker	
Support Associate	
Other: (List)	
total	

Education and Training Costs

Attachment III E

Purpose - To cover the incremental costs of orientation, education, and training specifically required for trauma personnel

Costs	Amount
Instructor cost and supplies	
16-hour Trauma nurse orientation	
Continuing Education	
ATLS Certification	
Other	
total	

Attachment III F

Specialized Equipment Needs

Purpose - To capture the estimated annual depreciation of equipment and technology to support optimal trauma care for the level of the hospital's trauma center designation.

Costs	Amount
Emergency Department	
Trauma resuscitation unit and related equip.	
Direct Communication link to pre-hospital transport	
Sterile surgical sets	
Auto transfusion equipment	
Other: (list)	
Operating Rooms, Recovery and Intensive Care	
OR and post-anesthesia recovery room	
ICU and Related equipment	
Equipment for neurosurgery, vasuclar surgery, pelvic and long-bone fracture	
X-Ray and C-arm image intensifier	
Burn Center	
Other: (list)	
Ancillary Services	
Radiologic services with dedicated CT, angiography, US, nuclear scanning, and back-up CT scanning	
Laboratory Service	
Other: (list)	
Post Acute Services	
Rehabilitation	
Other: (list)	
Transport Services	
Heliport	
Neonatal transport	
Other: (list)	
total	

TRAUMA STANDBY COSTS -REVISED *

Hospital	Trauma Costs Incurred	Reasonable Trauma Costs (Lower of RCE or Actual)	Reasonable Trauma Costs More/(Less) Than Actual
Johns Hopkins	$701,124	$701,124	$0
Memorial Cumberland	$262,232	$262,232	$0
PGHC	$1,359,551	$1,193,694	-$165,857
Sinai	$1,019,468	$851,166	-$168,302
Suburban	$462,275	$462,275	$0
Washington County	$1,300,000	$563,970	-$736,030
Totals	$5,104,650	$4,034,461	-$1,070,189

* CRNAs RCE 46.4% OF ANESTHESIOLOGIST

Attachment V

Anesthesiologist and CRNA salary comparison

Data Source	Median Salary Anesthesiologist	Median Salary CRNA	% of Anesthesiologist Salary
MGMA *1*	300,000	110,350	36.8%
Salary.com Balt. *2*	251,750	110,083	43.7%
Salary.com U.S. *3*	246,572	107,819	43.7%
Allied Consulting *4*	240,000	118,000	49.2%
Md. Hospital B *5*	259,750	145,000	55.8%
Md. Hospital A *6*	242,000	147,000	60.7%
Median			46.4%

Issues with data sources:

1. Medical Group Management Association; Based on surveys of independent non-hospital based physician groups; using national data; 600 anesthes. and 300 CRNAs; Anesthes. would include bonus or profit share where CRNAs would not; based on Part B billing

2. A web source from consultants review of employer-reported U.S. market salary data; do not know sample size but indicates that 90% of their job categories listed have more than 100 incumbant salaries, excludes benefits and bonuses to be comparable with other data sources

3. A web source from consultants review of employer-reported Balt. market salary data; do not know sample size but indicates that 90% of their job categories listed have more than 100 incumbant salaries, excludes benefits and bonuses to be comparable with other data sources

4. Based on USA Today article on 5/13/2002; 2001 data from Allied Consulting and Merritt Hawkings & Associates

5. Self-reported confidential hospital information; hospital has a trauma center; based on an hourly rate for first 6 months of CY 2003; does not include bonuses or benefits

6. Self-reported confidential hospital information; hospital has a trauma center; does not include bonus or benefits

Attachment VI

Calculation of Direct Strip for Incremental MIEMSS and Trauma Stanby Costs

Reported Incremental MIEMSS Costs by Category

	Level I	Level II			Level III			All
	JHH	Prince George's	Sinai	Suburban	PRMC	Washington County	Cumberland	Total
Trauma Director	$218,865	$337,500	$60,000	$239,500	$30,000	$103,426	$19,500	$1,008,791
Trauma Dept	$186,597	$126,986	$131,190	$139,100	$123,022	$148,458	$122,561	$977,914
Trauma Protocol	$194,191	$420,725	$316,922	$218,000	$111,410	$256,623	$24,556	$1,542,427
Spec. Trauma Staff	$2,225,441	$560,052	$587,284	$833,200	$411,081	$576,372	$372,712	$5,566,142
Education/Training	$183,272	$7,282	$56,000	$81,406	$114,018	$103,261	$13,370	$558,609
Spec. Equip. Needs	$74,964	$119,378	$300,645	$283,300	$387,313	$305,648	$139,285	$1,610,533
Total	$3,083,330	$1,571,923	$1,452,041	$1,794,506	$1,176,844	$1,493,788	$691,984	$11,264,416

75% hospital cost and 25% level cost

Level average cost	$3,083,330	$1,606,157	$1,606,157	$1,606,157	$1,120,872	$1,120,872	$1,120,872	
75%hosp/25%level	**$3,083,330**	**$1,580,481**	**$1,490,570**	**$1,747,419**	**$1,162,851**	**$1,400,559**	**$799,206**	**$11,264,416**
Standby Direct Strip	$701,124	$1,193,694	$851,166	$462,275	$0	$563,970	$262,232	$4,034,461
Total Direct Strip	$3,784,454	$2,774,175	$2,341,736	$2,209,694	$1,162,851	$1,964,529	$1,061,438	$15,298,877